

# Course sylabus - part A Oncology

## 48SJ-ONC ECTS: 4.00 CYCLE: 2024L

### SUBJECT MATTER CONTENT

#### LECTURE

1Biology of cancer: oncogenesis, abnormal cell division, malignant transformation, oncogenes, proto-oncogenes, antyonkogeny, the characteristics of cancer cells, apoptosis. 2 Basics of modern diagnosis and treatment of cancer: what is the cure in oncology, 5-year survival, mortality, primary and secondary prevention of cancer, screening, methods for diagnosing cancer, histopathological examination, tumor markers, tumor staging, Gleason grade, TNM system, degrees of clinical stage, treatment strategies for cancer, radical treatment, palliative treatment, combination therapy, prognostic factors and predictors. 3 radiotherapy of cancer radiotherapy radical palliative radiotherapy, radiation types, interaction of ionizing radiation with cells cancer therapeutic index, dose- fractionation, in emergency situations treated with radiation, radiotherapy, stereotactic radiotherapy intraoperative brachytherapy, complications acute and late radiotherapy. 4 Systemic treatment of cancer: chemotherapy classic, types of cytostatics, mechanism of action, route of administration, regimens, chemotherapy, radical and palliative, acute and late complications of chemotherapy, hormonal therapy, targeted therapies, immunotherapy. 5 Patient after cancer treatment: control after treatment, physical problems, social and mental health, disability, rehabilitation, chronic fatigue, problems with nutrition, sexual problems, pregnancy after cancer treatment, quality of 1.Gastrointestinal tract neoplasms. 2.Urogenital life. SEMINAR neoplasms. 3. Lung cancer and other cancers of the chest. 4. Breast cancer. 5. Genital tract neoplasms. 6. The head and neck neoplasms. 7. Sarcomas and skin cancers. 8. The central nervous system neoplasms. Seminars 1-8: epidemiology and etiology of various cancers, subjective and objective symptoms, environmental and genetic predisposition, screening, diagnostic imaging and functional, histopathological diagnosis, methods of treatment, results of treatment, observation after treatment, palliative treatment. 9. Radiotherapy: types of teletherapy and brachytherapy, the designation of irradiation, identifying critical areas, treatment planning, dose fractionation methods. 10. Cancer pain: the scale of the problem, the cause of pain, types of pain, the pain receptors, neuropathic pain, diagnosis, methods of pain assessment, principles of treatment of cancer pain, the WHO ladder, evaluation of treatment effect, breakthrough pain - diagnosis, treatment, drug-free treatment. Learning purpose: Students gain knowledge of the symptomatology, diagnosis and treatment of malignant tumors

#### SEMINAR

1.Gastrointestinal tract neoplasms. 2.Urogenital neoplasms. 3. Lung cancer and other cancers of the chest. 4. Breast cancer. 5. Genital tract neoplasms. 6. The head and neck neoplasms. 7. Sarcomas and skin cancers. 8. The central nervous system neoplasms. Seminars 1-8: epidemiology and etiology of various cancers, subjective and objective symptoms, environmental and genetic predisposition, screening, diagnostic imaging and functional, histopathological diagnosis, methods of treatment, results of treatment, observation after treatment, palliative

Legal acts specifying learning outcomes: 672/2020, 311/2023 **Disciplines:** medical sciences Status of the course:Obligatoryjny Group of courses:B przedmioty kierunkowe Code: ISCED 0912 Field of study: Medicine, Medicine Scope of education: Profile of education: General academic Form of studies: full-time Level of studies: uniform master's studies Year/semester: 5/10

Types of classes: Lecture, Seminar, Classes Number of hours in semester:Lecture: 10.00, Seminar: 10.00, Classes: 45.00 Language of instruction: English Introductory subject: Anatomy, histology, pathophysiology, internal medicine, pharmacology, laboratory diagnostics, radiology Prerequisites: Ability to physical examination of the

patient, knowledge of anatomy and histology of particular organs, knowledge of basic imaging, functional and laboratory knowledge of the etiology and epidemiology of cancer.

Name of the organisational unit conducting the course:Katedra Onkologii Person responsible for the realization of the course:prof. dr hab. n. med. Sergiusz Nawrocki e-mail:

Additional remarks:

treatment. 9. Radiotherapy: types of teletherapy and brachytherapy, the designation of irradiation, identifying critical areas, treatment planning, dose fractionation methods. 10. Cancer pain: the scale of the problem, the cause of pain, types of pain, the pain receptors, neuropathic pain, diagnosis, methods of pain assessment, principles of treatment of cancer pain, the WHO ladder, evaluation of treatment effect, breakthrough pain - diagnosis, treatment, drug-free treatment.

#### CLASSES

1Development of a patient's medical history of cancer: a) physical examination and symptoms, with particular attention to the interview focused on the diagnosis of cancer, environmental and genetic predisposition, b) planning diagnostic tests, c) the interpretation of the results of laboratory tests, imaging, functional, histopathology, d) putting the differential diagnosis and the final e) tumor staging, f) plan appropriate to the stage of cancer cancer treatment in the proper sequence (surgery, radiotherapy and systemic), g) plan diagnosis, treatment and control of potential side effects of treatment oncology, h) plan assessing the results of treatment, i) recognition of symptoms associated with cancer and suggest appropriate treatment - eg. cancer cachexia, pain, j) identification of nutritional needs and plan a possible dietary treatment, including paraenteral, k) recognize the psychological and social needs , propose remedial action, l) to propose a possible genetic counseling, m) the planning of control tests

#### **TEACHING OBJECTIVE**

Students gain knowledge of the symptomatology, diagnosis and treatment of malignant tumors with major emphasis on the role of combination therapy. In addition meets the principles of diagnosis and treatment of cancer pain and palliative care principles in oncology

DESCRIPTION OF THE LEARNING OUTCOMES OF THE COURSE IN RELATION TO THE DESCRIPTION OF THE CHARACTERISTICS OF THE SECOND LEVEL LEARNING OUTCOMES FOR QUALIFICATIONS AT LEVELS 6-8 OF THE POLISH QUALIFICATION FRAMEWORK IN RELATION TO THE SCIENTIFIC DISCIPLINES AND THE EFFECTS FOR FIELDS OF STUDY:

Symbols for outcomes	M/NMA_P7S_UW+, M/NM+++
related to the discipline:	

Symbols for outcomes related to the field of study:

K.1.+, E.W25.+, E.W24.+, E.W23.+, E.W26.+, K.2.+, K.3.+, KA7\_UU9+, E.U16.+

LEARNING OUTCOMES: Knowledge: W1 -Skills: U1 -Social competence: K1 -

#### **TEACHING FORMS AND METHODS:**

Lecture(W1;K1;): Seminar(U1;K1;): Classes(U1;K1;):

#### FORM AND CONDITIONS OF VERIFYING LEARNING

## **OUTCOMES:**

Lecture (Written exam) - Written exam - Written examination (multiple matching test) - Written exam - test 60 questions multiple choice 70% on credit. - Seminar (Colloquium test) - Colloquium test - null -

Classes (Colloquium practical) - Colloquium practical - null -

### **BASIC LITERATURE:**

 NCCN Guidelines, www.nccn.org, Wyd., R. 0
 The American, Cancer Society's Principles of Oncology: Prevention to Survivorship, Wyd, Wyd., R. 2018
 The American, Cancer Society's Oncology in Practice: Clinical Management, Wyd., R. 2018

#### SUPPLEMENTARY LITERATURE:

1. Wolters kluver Health, *Cancer - Principles and Praktice of Oncolog*, Wyd. Vincent de Vita, R. 2011

# Detailed description of ECTS credits awarded - part B

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Oncology

The number of ECTS credits awarded consists of:

1. Contact hours with the academic teacher:

<ul> <li>participation in: Lecture</li> <li>participation in: Seminar</li> </ul>	10.0 h 10.0 h
- participation in: Classes - consultation	45.0 h 5.0
	Total: 70.0 h.

2. Independent work of a student:

prepare for the exam	15.00 h
prepare for the seminar	15.00 h

Total: 30.0 h

contact hours + independent work of a student Total: 100.0 h

1 ECTS credit = 25-30 h of an average student's work, number of ECTS credit = 100.0 h : 25.0 h/ECTS = 4.00 ECTS on average: 4.0 ECTS

- including the number of ECTS credits for contact hours with the direct participation of an academic teacher: 0,00 ECTS points,

- including the number of ECTS credits for hours of independent work of a student: